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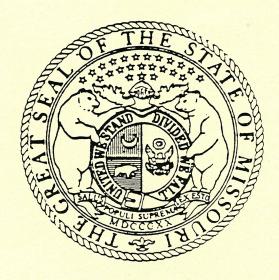
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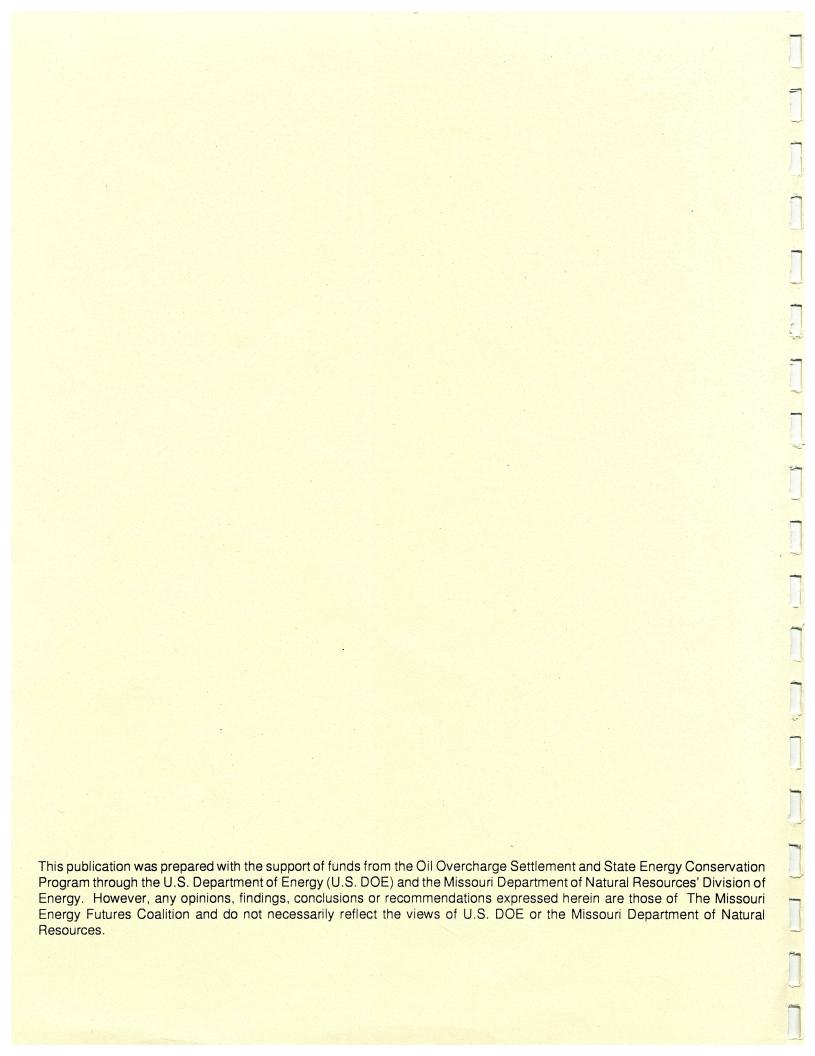
Missouri

Energy Futures Coalition

Interim Report October 25, 1995

Mel Carnahan, Governor





ENERGY FUTURES COALITION

Interim Report

October 25, 1995

Mission: To develop a practical and innovative plan to improve Missouri's economy, develop clean, domestic energy resources, increase energy efficiency, and improve environmental quality by finding opportunities, forging partnerships and exploring links throughout the state's organizations and people.

Executive Committee

Peter Dreyfuss, Chair
Metropolitan Energy Center
Dale Ludwig, Missouri Soybean Assoc.
Les Sterman, East-West Gateway Coord.
Council

Deborah Holmes, Vice-Chair KCPT-TV Mary Anne McCollum, Univ. of Mo.

Mike Apprill, Missouri Public Service Co. Russ Unger, Hulett Heating/Air Cond.

Membership

Ken Bacchus, The Bacchus Company
Robert Berkebile, BNIM Architects
David Bodde, Midwest Research Institute
Georgia Lee Clark, Community Publ. Co.
Dr. William Clark, Urban League of KC
Marina Cofer-Wildsmith, Amer. Lung Assoc.
Bob Evans, Crossroads Energy Services
Dr. Kent Farnsworth, Crowder College
Kate Fish, Monsanto Company
Michael Haggans, Hellmuth, Obata &
Kassabaum
Dean Hales, Hales 66
Robert Jaudes, Laclede Gas Co.
Drue Jennings, Kansas City Power & Light

Dan LeHockey, Sierra Club
Gary Marshall, Mo. Corngrowers Assoc.
Al Mueller, Public Service Commission
Charles Mueller, Union Electric
John Pelzer, Mo. Petroleum Marketer's Assoc.
Javier Perez, Amalgamated Transit Union
Don Shaw, Central Electric Power Coop.
Ric Telthorst, Missouri Oil Council
Dr. Albert Vogt, Univ. of Mo.
Elaine West, Mo. Assoc. For Community
Action
Dr. Charles Wheeler, Wheeler Medical Labs.
Wallace Willard, Mo. Propane Gas Assoc.

Rosemary Wilson, Center/Energy & Eco. Dev.

Missouri Energy Futures Coalition

October 1995

Executive Committee

Peter Dreyfuss, Chair Deborah Holmes, Vice-Chair Dale Ludwig Mary Anne McCollum Les Sterman Mike Apprill Russ Unger

Members

Ken Bacchus Robert Berkebile David Bodde Georgia Lee Clark Dr. William Clark Marina Cofer-Wildsmith **Bob Evans** Dr. Kent Farnsworth Kate Fish Michael Haggans Dean Hales Robert Jaudes Drue Jennings Dan LeHockey Gary Marshall Al Mueller Charles Mueller John Pelzer Javier Perez Don Shaw Ric Telthorst Dr. Albert Voot Elaine West Dr. Charles Wheeler Wallace Willard Rosemary Wilson

Governor Mel Carnahan and the Missouri General Assembly:

The Missouri Statewide Energy Study, released in 1992, raised our awareness of the significant economic impact that energy use has in our state. That Study indicated that we spend nearly \$10 billion each year on energy. The Study identified a long list of opportunities for the state to become more energy efficient and for the state to enhance its own energy supply.

Through Executive Order 94-10, the Governor's Energy Futures Coalition was established in the Fall of 1994 to examine the opportunities for Missouri to reduce energy consumption and improve our energy efficiency. Prominent representatives from business, industry, labor and environmental groups were appointed by Governor Carnahan to review the 1992 Energy Study, examine options available to Missouri and recommend a course of action for an energy efficient future.

The Coalition has spent the first year researching the issues and opportunities and developing an interim report. We will present a final report with an action plan in November 1996.

Working closely with the staff of the Division of Energy, the Environmental Improvement and Energy Resources Authority, other state departments and the generous commitment of time of private businesses and other interested organizations and citizens, the Coalition identified four key areas to examine. Committees that were established to study the areas are: Transportation; Information, Education and Incentives; Residential, Commercial and Industrial Buildings; and Alternative and Renewable Energy Supply.

Each committee has developed goals, objectives and preliminary recommendations within their area of responsibility. During the coming year, these objectives and recommendations will be examined and expanded resulting in a comprehensive plan of action for State government and the citizens of Missouri.

We are pleased to submit for your consideration this interim report of the Energy Futures Coalition. We invite your review and comment and encourage your participation in our continuing deliberations to enhance Missouri's economy and environment through the enhanced use of energy and implementation of energy efficiency policies, programs and actions.

Sincerely,

Peter Dreyfuss, Chairman

Peter Drey pres

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Energy Futures Coalition Executive Summary - October 25, 1995

For the past year, the Energy Futures Coalition has worked to develop a preliminary set of goals and objectives to examine the opportunities for Missouri to reduce energy consumption and improve our efficiency. The following is a summary of our activities to date, organized in four areas, based on committees that were established by the Coalition. A final report with recommendations for action will be completed in November 1996.

Coalition Mission

To develop a practical and innovative plan to improve Missouri's economy, develop clean, domestic energy resources, increase energy efficiency and improve environmental quality by finding opportunities, forging partnerships and exploring links throughout the state's organizations and people.

Education, Information, Marketing and Incentives

Goal: Provide rapid, reliable energy information, and to educate and raise the awareness of Missourians about energy efficiency and alternative consumer choices that provide a sound, clean environment and economic vitality.

Objectives:

- Raise public energy awareness, and assure that Missouri citizens have timely access to reliable information about how energy choices are related to environmental and economic quality of life.
- Encourage broad, well-informed public participation in state and local energy decision-making processes and programs.
- Recognize outstanding achievements and develop other incentives that encourage voluntary advancement of energy efficiency, appropriate technology and renewable energy resources in the state of Missouri.

Transportation Subcommittee

Goals: Improve Missouri's economic productivity by: (1) Establishing a decision-making process for transportation-related investments by the State of Missouri, metropolitan planning organizations and public transportation providers. This process should take into account the total cost-effectiveness of the proposed investment, including all costs and benefits across all modes and fuels; (2) Promoting energy efficient transportation decisions by the private sector and citizens of Missouri.

Objectives:

- Identify performance indicators, set up required data collection processes to track the indicators, and develop goals.
- Establish a process for meaningful public participation in transportation decision-making.
- Coordinate the efforts of state agencies, transportation planning organizations and public transportation providers in transportation planning and decision-making.
- Establish uniform methods for determining the full costs and benefits of proposed transportation investments.
- To take advantage of opportunities for creating an awareness of energy efficiency concerns in transportation decision-making throughout the State of Missouri.

Residential, Institutional, Commercial and Industrial Facilities

Goals: (1) Provide the residential, commercial and industrial consumers of energy services for buildings in Missouri with diverse, competitive and affordable choices that best contribute toward sustainable economic growth and environmental quality; (2) Maintain high standards for safety and reliability with energy systems that promote improved human health and increased productivity.

Objectives:

- Encourage life-cycle costing when considering building operation and design.
- Support both educational efforts and mandates for energy efficiency in buildings.
- Support energy services for low-income households.

Alternative and Renewable Energy Supplies

Goal: Develop alternative and renewable energy sources that improve Missouri's economic productivity and environment. The priority should focus on energy sources that originate in Missouri.

Objectives:

- Create an environment in Missouri that nurtures the development of those alternative and renewable energy supplies that provide our state the greatest long term competitive advantage, economically and environmentally.
- Improve the efficiency of fossil fuel use.
- Assess the relative practicality of alternative and renewable energy sources in our region, including consideration of life-cycle costs, macro-economic impacts and environmental concerns.
- Focus priority on energy sources that are indigenous to Missouri.

Committee Reports



Committee Report Education, Information, Marketing and Incentives

Members	Mary Anne McCollum, Chair	Charles Wheeler
	Robert Berkebile	Elaine West
	Kate Fish	Mike Apprill
	Al Mueller	John Pelzer

Goal

Provide rapid, reliable energy information, and to educate and raise the awareness of Missourians about energy efficiency and alternative consumer choices that provide a sound, clean environment and economic vitality.

Objectives

- Raise public energy awareness, and assure that Missouri citizens have timely access to reliable information about how energy choices are related to environmental and economic quality of life.
- Encourage broad, well-informed public participation in state and local energy decision-making processes and programs.
- Recognize outstanding achievements and develop other incentives that encourage voluntary advancement of energy efficiency, appropriate technology and renewable energy resources in the state of Missouri.

Preliminary Recommendations

- 1. Support development of a coordinated, accessible public energy information network, linking data from diverse, reliable information resources.
- 2. Evaluate the public education curriculum for opportunities to increase energy literacy. For example, consider implementing all or part of the "Report and Recommendations of the Governor's Task Force on Environmental Education: Creating an Environmentally Literate Citizenry."
- 3. Develop an effective public information dissemination program about energy policy, economic, technical and consumer issues from state agencies.

- 4. Develop a program of performance indicators to evaluate progress toward energy-related goals arising from the state's energy strategy.
- 5. Support and inform state and other policy and program decisions with the best currently available information and analyses. Develop a system for collecting and integrating new data and analyses into decision-making processes, building on such foundations as the 1992 Energy Study.
- 6. Encourage the promotion of energy efficiency in both the public and private sectors.
- 7. Encourage and reward state interagency collaboration toward achieving these objectives.

Committee Process

The committee has reviewed the Department of Natural Resources' Division of Energy FY96-97 plans for changes in its public information and education programs.

The Committee on Information, Education, Marketing and Incentives met five times, coinciding with the full Energy Futures Coalition meetings. The committee also sponsored several conference calls to expand ideas presented in the regular meetings.

The committee sought to identify existing successful programs and to collect other relevant information from public and private sources. The committee also looked into why a program was successful.

The committee learned about and requested the Report from the Governor's Task Force on Environmental Education. Committee members reviewed the report and included references from it in their recommendations.

The committee met with Cher Stuewe-Portnoff, Director, Department of Natural Resources' Division of Energy, to review current and proposed plans for public information and education. The committee supports the efforts of Division of Energy and may provide advice from time to time.

The committee determined that it must work closely with the other Energy Futures Coalition committees to provide feedback on education/information issues since each committee has a need for this type of input.

Committee Report Transportation

Members	Les Sterman, Chair	Michael Haggans
	Ric Telthorst	Deborah Holmes
	Don Kueneke	Peter Dreyfuss
	Javier Perez	

Goals

Improve Missouri's economic productivity by:

- 1. Establishing a decision-making process for transportation-related investments by the state of Missouri, metropolitan planning organizations and public transportation providers. This process should take into account the total cost-effectiveness of the proposed investment, including all costs and benefits across all modes and fuels.
- 2. Promoting energy efficient transportation decisions by the private sector and citizens of Missouri.

Objectives

- Identify performance indicators, set up the required data collection processes to track the indicators, and develop goals.
- Establish a process for meaningful public participation in transportation decisionmaking.
- Coordinate the efforts of state agencies, transportation planning organizations and public transportation providers in transportation planning and decision-making.
- Establish uniform methods for determining the full costs and benefits of proposed transportation investments.
- Take advantage of opportunities for creating an awareness of energy efficiency concerns in transportation decision-making throughout the state of Missouri.

Preliminary Recommendations

- 1. Establish and administer an interagency review process for all state departments that are responsible for transportation investments, transportation planning organizations and public transportation providers.
- 2. Establish uniform methods for determining the full costs and benefits of proposed transportation investments.
- 3. Develop a list of transportation-related energy performance indicators. A partial listing of performance indicators includes:
 - Transportation-related fuel consumption by fuel type;
 - Transportation-related fuel consumption by sector;
 - Output-based energy efficiency index (kilogram of oil equivalent per dollar of GDP);
 - Annual energy expenditures for motor fuel;
 - Annual motor fuel energy expenditures by sector;
 - State economic productivity measures.
- 4. Collect and analyze any existing data and make it available for the interagency review process. Develop any additional data bases deemed necessary and appropriate to support the state interagency review process relevant to the identified performance indicators.
- 5. Establish numerical goals for transportation-related energy performance indicators.
- 6. Where necessary, develop and implement guidelines to ensure public participation in transportation decision-making.
- 7. Establish a technical assistance program for state departments, transportation planning organizations and public transportation providers to assist them in evaluating the energy efficiency of proposed transportation investments.
- 8. Educate the citizens of Missouri regarding the opportunities and value of making energy efficient transportation decisions.

Committee Process

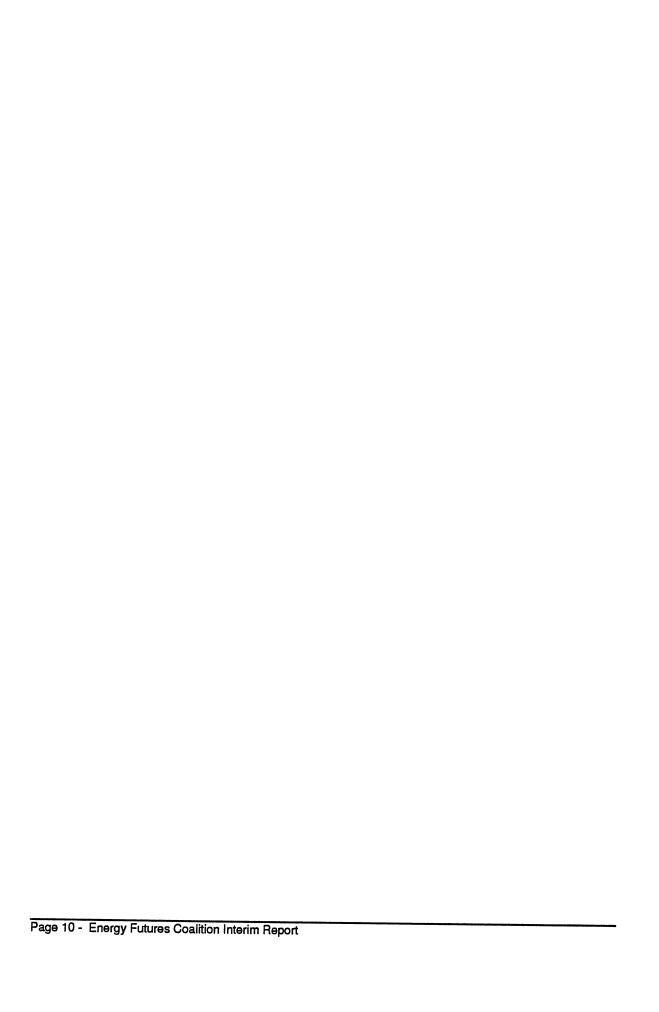
The Transportation Committee has met eight times. Meetings have taken place in Jefferson City, St. Louis and by conference call. The subcommittee members have received valuable support and assistance from J. T. Yarnell of the Missouri Highway and Transportation Department, and Bill Borgmeyer of the Missouri Department of Economic Development.

The subcommittee began by developing the following 4-step work plan:

- 1. Data identification, collection, and analysis;
- 2. Policy discussion on linkages between transportation, energy, and Missouri's economy;
- 3. Strategy development;
- 4. Formulation of recommendations.

So far, the members have produced preliminary drafts addressing the first three steps of the work plan. During this process, the following points have been agreed upon:

- 1. That the focus of the subcommittee's work should be on systemic policy level issues rather than specific actions.
- 2. That the transportation system and transportation energy should be viewed primarily as investments affecting the economic productivity of the state.
- 3. That the identification and analysis of trend-line performance indicators is critical, but that this activity could be hampered by the lack of reliable data.
- 4. That the subcommittee's report should concentrate on how state and other public sector transportation officials can improve decision-making processes.



Committee Report Residential, Institutional, Commercial & Industrial Facilities

Members	Russ Unger, Chair	John Moten
	Dean Hales	Steve Cattron
	Bob Evans	Dr. David Bodde

Goals

- 1. Provide the residential, commercial and industrial consumers of energy services for buildings in Missouri with diverse, competitive and affordable choices that best contribute toward sustainable economic growth and environmental quality.
- 2. Maintain high standards for safety and reliability with energy systems that promote improved human health and increased productivity.

Objectives

- Encourage life-cycle costing when considering building operation and design.
- Support educational efforts rather than mandatory efforts for energy efficiency in buildings.
- Support energy services for low-income households.

Preliminary Recommendations

Building Operation and Design

- 1. Continue support of life-cycle costing methodologies and existing mandates for state buildings.
- 2. Encourage, but not mandate, life-cycle costing methodologies for non-state buildings.

Energy Rating System

1. Support the development of a state residential energy rating system involving both the public and private sectors.

Services For Low Income Households

- 1. Develop a strategy of support for low-income households to assist in weatherization of their homes and purchase of needed home energy.
- 2. Examine the development of state resources for both the Low-Income Weatherization Assistance Program and the Low-Income Home Energy Assistance Program.

Appliance and Equipment Standards

1. Support a voluntary national effort for improved energy efficiency labeling of appliances.

Financing

- 1. Support the development and implementation of energy efficient mortgages in Missouri.
- 2. Examine the potential for energy efficiency financing programs in the commercial and industrial sectors.

Committee Process

This document narrows the list of issues that are clearly within the scope of the residential, commercial and industrial buildings subcommittee. Areas of consensus and controversy were identified as follows.

Services For Low Income Households

General Consensus

Two federally funded programs designed to assist low-income households weatherize their homes and purchase needed home energy, known as the Low-Income Weatherization Assistance Program (LIWAP) and the Low-Income Home Energy Assistance Program (LIHEAP), are facing funding cuts.

Building Operation and Design

General Consensus

- 1. Typically, the conservation of money, not energy, provides the primary motivation for decisions. Thus, economics traditionally dominate over environmental considerations and initial costs may dominate over long-term energy considerations.
- 2. Energy efficiency can have a positive impact on human health and productivity.
- 3. Impacts of life-cycle costing on new construction needs to be considered. For example, if Missouri emphasizes life-cycle costing, but bordering states do not emphasize life-cycle costing, construction costs of locating in Missouri may be a consideration in site selection.

Controversies

- 1. Sometimes, objectives to minimize initial construction costs may outweigh long-run operating cost considerations.
- 2. Lowest life-cycle costs may not necessarily reflect highest energy savings or least environmental impacts.
- 3. Defendable methodologies do not exist for comparing comprehensive economics of end-use energy alternatives. For example, methodologies do not always account for fuel-cycle efficiency comparisons or environmental impacts.

Energy Rating System

General Consensus

- 1. Energy rating systems are typically superior to command and control strategies such as building codes.
- 2. Energy rating systems appropriately enhance the importance of long-run operating costs versus first costs.
- 3. At present, the framework for energy rating systems is limited to residential buildings.
- 4. Energy rating systems require re-education and subsequent policy changes for realtors, builders, and related trades.

- 5. Home energy rating systems and energy-efficient mortgages reflect the fact that more efficient homes are more affordable and, therefore, should qualify for larger loans.
- 6. Energy rating systems should be expanded to commercial and industrial construction.

Controversies

Possible resistance by some to any type of rating system.

Appliance and Equipment Standards

General Consensus

- 1. Usually, the least expensive equipment is the least efficient. Volume production of more efficient appliances leads to unit cost decreases. Therefore, mandating higher equipment performance standards may provide expedient and cost-effective energy conservation and environmental gains in the marketplace.
- 2. Command and control strategies invariably lead to more regulations and government intervention.
- 3. Knowledgeable consumers should *theoretically* make investments in energy efficiency because related savings usually significantly surpass traditional economic investments such as money-market accounts, savings bonds, etc.
- 4. If standards are not set at a federal level, then each state may develop its own standards, thus removing the advantages of economy of scale for production.

Issues discussed, but not included in this report are as follows:

Issue	Eliminating Rationale
HVAC Contractor Licensing	This is more of a consumer protection issue than one of energy efficiency.
Building Codes	Market based strategies, such as home energy rating systems, present greater opportunities for energy efficiency than building codes, which are primarily designed to address safety issues.

Committee Report Alternative & Renewable Energy Supplies

Members	Dale Ludwig, Co-Chair	Charles Mueller	
	Gary Marshall, Co-Chair	Don Shaw	
	Kent Farnsworth	Al Vogt	
	Rosemary Wilson		

Goal

Develop alternative and renewable energy sources that improve and sustain Missouri's economic productivity and environment. The priority should focus on energy sources that originate in Missouri.

Objectives

- Create an environment in Missouri that nurtures the development of those alternative and renewable energy supplies that provide our state the greatest competitive advantage, economically and environmentally.
- Assess the relative practicality of alternative and renewable energy sources in our region, including consideration of life-cycle costs, economic impacts and environmental concerns.
- Focus priority on energy sources that are indigenous to Missouri.

Preliminary Recommendations

Transportation Fuels

- 1. Make alternative and renewable fuels a priority in state agency fleet management plans, with emphasis on Missouri-based resources.
- 2. Develop and implement life-cycle costing methodology which includes all economic activities, both positive and negative, when making energy supply decisions.
- 3. Develop the means to provide information and training to Missouri public and private fleet managers on renewable/alternative fuels.

Electric Generation

- 1. Optimize utilization of existing hydro-electric facilities.
- 2. Investigate the potential for electric generation using renewable energy sources and examine new technology.

Industrial Process Heat

- 1. Identify opportunities for Missouri industries to utilize by-product and waste materials for production of process heat and hydrocarbon products that would otherwise use fossil fuels.
- 2. Investigate the commercialization of process heat technologies that utilize alternative and renewable fuels.

Implementation

- 1. Develop the means to evaluate alternative applications, cost effectiveness and feasibility of alternative and renewable fuels.
- 2. Develop the means to commercialize alternative/renewable fuels.

Committee Process

Discussion

- Identify alternative and renewable energy possibilities for Missouri's future; review the statewide energy study, as well as other pertinent information, and receive input from experts in various alternative energy fields.
- Develop proposals on dissemination of this information.
- Make specific recommendations concerning development of those alternative and renewable energy supplies considered to have the greatest potential for Missouri.
- Examine energy supply issues and the efficiency of fossil fuel use in the coming year.
- Examine new technology that might be feasible in existing facilities.

A series of committee meetings has been held to develop a sense of the project and to develop quality recommendations for the Governor. Initially, a list of alternative and renewable energy sources was developed:

Renewable Energy Resources

- Hydropower
- Wind
- Solar
- Biomass
 - Corn ethanol
 - Biodiesel
 - Wood
 - Grasses
 - Animal fats
 - Biomethane
 - Geothermal

Alternative Energy Resources

- Waste to energy
- Landfill gas
- Alternative vehicle fuels
 - Liquid petroleum gas
 - Compressed natural gas
 - Liquefied natural gas

Experts on alternative and renewable energy resources shared information with the committee. The topics included the areas of ethanol production (Missouri Corn Growers Association); biodiesel (National Biodiesel Board); hydropower (Missouri Department of Natural Resources' Water Resources Program); wood energy (Missouri Department of Conservation, Forestry Division); wind and solar power (Crowder College and The Solar Doctors Company); and methane and compressed natural gas (Department of Natural Resources' Division of Energy). Committee members supplied information on issues of mutual interest such as the Missouri Statewide Energy Study. Other resources were also reviewed for baseline information.

This process has generated the goal, objectives and preliminary strategies and actions identified above. In the year to come, the committee will develop policy and supporting action item recommendations for the Coalition's and Governor's consideration.



Appendices Energy Futures Coalition Interim Report - Page 19



Executive Order

WHEREAS, the Environmental Improvement and Energy Resources Authority and the Division of Energy of the Department of Natural Resources have completed the comprehensive Missouri Statewide Energy Study; and

WHEREAS, the methodology of the study provided input from a broad array of interested parties encompassing social, economic, and political issues that impact the State of Missouri and its citizenry; and

WHEREAS, the Statewide Energy Study provides initiatives, recommendations, and action items to be considered for implementation to further the development of a long-term energy policy for the State of Missouri; and

WHEREAS, House Concurrent Resolution 16, as passed by the First Regular Session of the 87th General Assembly, mandates a written review of the state's obligations under the federal Energy Policy Act of 1992 to include specific mention of energy efficiency, construction technology improvements, and cost savings; and

WHEREAS, a long term energy policy contributes to the creation of a sustainable future in Missouri by using energy more efficiently, strengthening the economic base, and improving the environment; and

'WHEREAS, development of energy policy and commitment of limited resources should be guided by a coordinating body, organized and assembled to reflect the interests of citizens, organizations, private business, utilities, and other energy interests;

NOW, THEREFORE, I, Mel Carnahan, Governor of the State of Missouri, by virtue of the authority vested in me by the Constitution and laws of the State of Missouri, do hereby establish a body to be known as "The Energy Futures Coalition" as follows:

- 1. The Coalition shall be composed of at least 20 members and no more than 30 members, appointed by the Governor and serving at the pleasure of the Governor. Membership shall include representatives of the citizenry-at-large, not-for-profit entities, representatives of the private sector, utilities and other energy providers, universities, research organizations, media and local government.
- 2. Within thirty days after the appointment of the members, the Coalition shall meet and organize by selecting, from among its members, a chairman, vice-chairman and five members to form an executive committee to act for and within the larger-body. The Coalition may make rules and orders for the regulation of its proceedings as it deems proper and a majority of its members shall constitute a quorum. The Coalition shall meet at least quarterly, as determined by the chairman. The executive committee shall meet more frequently, as determined by the chairman.
- 3. The primary role of the Energy Futures Coalition is to serve in an advisory capacity to the Governor. The Coalition will not design or operate actual programs, thus, preserving the objectivity and independence of the Coalition from any energy organization or program.
- 4. The initial focus of the Coalition shall be a thorough analysis of the Statewide Energy Study to identify long-term requirements and opportunities, establish priorities for these based on the final report as mandated by HCR 16, and develop a consensus for recommendations and priorities on which others may act to create a sustainable energy future.
- 5. The duty of the Coalition is to keep the citizens of Missouri updated on progress toward a more energy efficient future. The Coalition shall report such progress on an annual basis.

- 6. Within one year from the Coalition's first meeting, the Coalition shall provide the General Assembly and the Governor with a written report addressing the findings of the Coalition and recommendations for state action.
- 7. Members of the Coalition shall receive no compensation for their services, but will be reimbursed for their actual and necessary expenses connected with the performance of their duties.
- 8. The Division of Energy of the Department of Natural Resources and the Environmental Improvement and Energy Resources Authority shall assist the Coalition and provide such services as may be required.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Missouri, in the City of Jefferson, on this 2nd day of March, 1994.

ATTEST:

History and Background of the Energy Futures Coalition

May 1992 - Statewide Energy Study Recommendation

In 1991 and 1992, the Missouri Department of Natural Resources conducted a study of all aspects of energy supply and use in Missouri. The study was coordinated by the Environmental Improvement and Energy Resources Authority with support from the Division of Energy. The results were released in May 1992 as the *Missouri Statewide Energy Study*. This report documented that in 1990 Missourians spent approximately \$10 billion on all of their energy needs which represented nearly 11% of the total income for the state. Since Missouri must import most of the energy that it uses, most of these expenditures leave the state's economy. The study makes the case that efficiency in our energy consumption allows more of our income to remain in the state and reduces environmental pollution. One of the major recommendations of the study was to create an Energy Futures Coalition to build a foundation to promote a sustainable energy future for Missouri.

December 1993 - HCR 16 Report (Economic Opportunities Through Energy Efficiency)

With the findings of the Missouri Statewide Energy Study as a foundation and the impetus from Congress in the form of the Energy Policy Act of 1992 (ENERGY POLICY ACT OF 1992), the Missouri General Assembly passed House Concurrent Resolution 16 (HCR 16) in April of 1993. This resolution which directs the Environmental Improvement and Energy Resources Authority, the Division of Energy and the Office of Administration to analyze the obligations of ENERGY POLICY ACT OF 1992 on Missouri and to further analyze energy efficiency standards for buildings, was released in December of 1993 in a Report to the Missouri Legislature Pursuant to House Concurrent Resolution 16: Economic Opportunities Through Energy Efficiency and the Energy Policy Act of 1992.

March 2, 1994 - Governor's Executive Order 94-10

Building on the Statewide Energy Study and the HCR 16 report, Governor Carnahan issued an Executive Order (94-10) in March of 1992 establishing the Energy Futures Coalition. This order is included in Appendix A. The primary role of the Energy Futures Coalition is to serve in an advisory capacity to the Governor and develop a consensus for recommendations and priorities upon which others may act to create a sustainable energy future for Missouri. The Coalition is to assure that citizens of Missouri are kept informed on progress toward a more energy efficient future. The Governor appointed 29 members to the Coalition (four members were added later) in the summer of 1994.

Organization of the Coalition

The Coalition first met in October of 1994. A seven-person Executive Committee was formed consisting of the chair, the vice-chair, the four subcommittee chairs and one other member. Four subcommittees were formed:

- Alternative and Renewable Energy Supplies
- Residential, Institutional, Commercial and Industrial Facilities
- Transportation
- Education, Information, Marketing and Incentives

The Coalition has been staffed by the Division of Energy of the Department of Natural Resources with assistance from the Environmental Improvement and Energy Resources Authority, the Missouri Highway and Transportation Department and the Department of Economic Development.

Meetings of the Coalition

The Coalition met six times in its first year (agendas and minutes are included in Appendix B):

ity

Interim Report

At its October 3, 1995 meeting, the Coalition members approved an interim report to be presented to the Governor on October 25, 1995.

Meeting Agendas & Minutes Energy Futures Coalition Interim Report - Page 25



Energy Futures Coalition

October 4, 1994 Jefferson City, MO 10:00 a.m. - 4:15 p.m.

Agenda

10:00 - 10:15	WELCOME • David A. Shorr, Director Missouri Department of Natural Resources	Truman A
10:15 - 10:30	Introductions	
10:30 - 11:00	Background of Energy Futures Coalition Executive Order 94-10 Statewide Energy Study	
11:00 - 12:00	Roundtable Discussion: Members' Expectations	
12:00 - 1:30	 Featured Speaker: Frank Stewart Manager, Field Operations National Renewable Energy Laboratory Golden, CO 	Truman B
1:30 - 3:00	Roundtable Discussion: Establishing Priorities For the Coalition Greatest long-term impact Quick-strike options	Truman A
3:00 - 3:15	BREAK	
3:15 - 4:00	 Roundtable Discussion: Establishing Task Groups Market-driven initiatives Public information and participation initiatives Legislative initiatives Regulatory initiatives 	
4:00 - 4:15	Administrative Issues	
4:15 p.m.	ADJOURN	

Minutes

Expectations and Questions

The meeting of the Energy Futures Coalition began with each member being asked what expectations they had for this group, and what questions they may have about its purpose. The responses suggested that the Coalition should:

- provide an opportunity to learn about the issues;
- examine how to educate the general public and gain more widespread involvement in energy issues;
- explore how to generate more commitment from state government;
- try to establish a larger partnership that extends beyond the state government;
- ask what funding sources are available; who will pay for energy efficiency investments;
- realize that personal attitudes are hard to change, especially in an environment in which energy is relatively inexpensive;
- try to stabilize the financial future of the Division of Energy;
- seek solutions that extend beyond the state government, because by itself it is not a major user of energy;
- use state government as a good place to set examples for the rest of the state;
- develop a specific implementation timeline; and not merely produce another report;
- provide a long-term vision for Missouri's energy future;
- develop linkages between the intended and the unintended consequences of actions;
- address opportunities for low-income Missourians, since they are relatively large consumers of energy;
- deal with programs and applications, and not focus overly much on technological issues;
- place a high degree of focus on applications not within government;
- develop recommendations for components of state government besides the Division of Energy and the Environmental Improvement and Energy Resources Authority;

- expect that its members themselves become active participants in the process;
- expect that its members would use their existing spheres of influence to advance the purposes of the Coalition;
- perform a coordinating function, so that currently available dollars are used optimally;
- look for linkages beyond the obvious;
- set directions regarding Missouri's future energy supply mix, its ability to be selfsustaining in energy, and its use of renewable energy resources;
- re-focus existing funding more effectively;
- avoid the trap of seeking the one magic bullet in energy management: "one size does not fit all"; and,
- state its vision in quantifiable terms, so that progress can be tracked.

Vision Statement

Coalition members briefly discussed the context of an appropriate vision statement, in light of the original Missouri Statewide Energy Study's preliminary concept of 2% net energy reduction by the year 2000.

The members concluded, as did the original study, that this was an inappropriate expression of the objective, for a variety of reasons, including:

- Economic growth objectives must be taken into account;
- One cannot apply a fixed percentage across the board to all sectors of the economy;
- It is not known with certainty what is realistic; and
- A long-term vision should be established before committing to particular numerical targets;

It was suggested that a vision statement based on energy efficiency (i.e., per capita consumption), could be the basis for a better statement.

The group agreed to undertake the development of a *provisional* vision statement, then turn its attention to the detailed work, and then revisit the vision statement for any modifications necessary. Brainstormed elements which could be considered for the provisional statement are presented below:

Potential Words and Phrases For Vision Statement

 cost versus benefits • resource efficiency energy efficiency • public participation • iobs • an educated public • public education • cost effectiveness linkages • educated public agencies • environmental quality inclusiveness price • sustainable partnerships • long-term • price reflects true cost • immediate action economic and • reliable, dependable supply environmental quality

What Problem Are We Addressing?

The question was posed as to what problem, or opportunity, it was that the group was supposed to address. That is, what is the motivation for convening the Energy Futures Coalition. The suggestions:

- We have a set of opportunities and do not want to miss them;
- Current patterns of energy production and consumption in Missouri are less than optimal from the points of view of economic and environmental impact;
- This is an opportunity to address a few immediate crises; for example, St. Louis-area compliance with the clean air rules;
- Globally, resource demand is growing exponentially, versus the finite supply. The
 Coalition members agreed, however, that this level of motivation is not meaningful to
 most Missourians;
- The opportunity may exist to develop energy-related products and services for export, thus creating Missouri jobs;
- Missouri's economic self-interest is served by this kind of energy planning;
- Referring to St. Louis, the area must change its course if it is to reverse thirty years of non-growth in the economy and population;
- Missouri has the opportunity to attract additional jobs by virtue of pursuing strategies for supplying low-cost energy.

This discussion also raised the question of what an energy planning process by the Coalition would accomplish that utilities' integrated resource planning (IRP) does not.

Quick-strike Options

The Coalition developed a preliminary, tentative list of eleven ideas which could be considered for rapid implementation. They were:

- Ask the Governor to identify the legislation needed to implement a voluntary Home Energy Rating System (HERS) and a related state loan program to inaugurate energy-efficient mortgage lending;
- Establish a recognition program for efficiency successes in state government;
- Develop a promotional plan to further accelerate the adoption of the Green Lights program by private businesses;
- Establish an annual award to recognize energy efficiency successes;
- Conduct a design contest among the state's undergraduate programs regarding the promotion of renewable, commercializable, in-state energy resources;
- Start a state-wide public information campaign to educate the public about energy issues;
- Implement a bonus plan to reward state employees using Amtrak for intrastate travel;
- Have the Department of Economic Development pursue business development strategies based on Missouri's energy advantages, for example, targeting financial institutions and energy service companies;
- Have the next facility constructed or refurbished by state government be developed as a state-of-the-art demonstration project, and use the results to attract similar development in the state;
- "Outlaw" the installation of conventional thermostats, and require that set-back thermostats be used instead. The program could include subsidies or give-aways; and
- Distribute energy-oriented materials to elementary and secondary schools throughout the state.

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Energy Futures Coalition

December 6, 1994 Columbia, Missouri 10:00 a.m. - 3:00 p.m.

Agenda

10:00	Election of Chair and Vice-chair Bill Palmer to facilitate the election. Following the election, the newly-elected chair will facilitate the meeting.
10:30	Review, Discussion, and Adoption of Draft Mission Statement EFC Chair
11:00	Review of Committee Assignments and Guidelines for each Committee. Review of change of Governor's Executive Order. EFC Chair
12:00	Lunch Committees will sit together for discussion purposes.
1:00	Break-out Session for each Committee
	Selection of chair
	DNR person will be assigned to serve as staff contact: Wilma Yowell-SteinmanEducation, Information, Incentives & Marketing Pam BarkhausTransportation Lesa JenkinsResidential, Commercial and Industrial Sam OrrAlternative & Renewable Energy Supplies (includes Ag)
2:00	Committee Reports to Entire Committee Chair Group
3:00	Dismissal

Minutes

Bill Palmer opened the meeting by introducing two new members of the EFC: John Pelzer, Executive Director, MO Petroleum Marketer's Association in Jefferson City; and Mike Apprill of MO Public Service in Kansas City.

Overview of Previous Activities

Mr. Palmer then provided an overview of the first meeting held on October 4 and activities conducted since that meeting. An interim steering committee was established at the first meeting to determine an organizational structure for the group and solicit members for the Executive Committee. Members of the interim committee were Peter Dreyfuss, Deborah Holmes, Dale Ludwig, John Moten and Al Mueller. The interim committee conducted two conference calls prior to the December 6 meeting. As a result, four subcommittees were developed. A survey was distributed to all EFC members and they were asked to indicate a first and second choice for membership on one of the four subcommittees, compatible with their area of interest. The four subcommittees were: Education and Information, Incentives and Marketing; Transportation; Residential, Commercial and Industrial; and Alternative and Renewable Energy Supplies.

The Steering Committee also discussed how to establish the Executive Committee. It was agreed that the Executive Committee would be comprised of the Chair and Vice-Chair of the Coalition, the chairpersons of each of the subcommittees, and an additional member to be named. They also discussed what role individuals who are representing official members would play in the organization.

Election of Chair and Vice-Chair

Prior to the December 6 meeting, nominations were solicited for Chair and Vice-Chair. No floor nominations were received. Being that Peter Dreyfuss was the only nomination received for Chair, he was appointed by acclamation.

Deborah Holmes and Bob Berkebile were nominated for Vice-Chair. Mr. Berkebile withdrew his name from consideration. There were no other nominations. Ms. Holmes was appointed by acclamation.

Discussion and Adoption of Draft Mission Statement

Prior to the meeting, Kate Fish developed a draft mission statement which was reviewed during the meeting. Comments centered around the use of the term "imported" when referring to Missouri-produced energy supplies vs. energy supplies imported into the state. It was agreed that the phrase "reduce its dependence" should be deleted and "develop clean, domestic energy resources" inserted in lieu thereof. Everyone was in agreement with the "Vision" portion of the mission statement.

The mission statement, as corrected, was approved. It reads as follows: ... to develop a practical and innovative plan to improve Missouri's economy, develop clean, domestic energy resources, increase energy-efficiency, and improve environmental quality by finding opportunities, forging partnerships and exploring links throughout the state's organizations and people.

Review of Committee Assignments and Guidelines

Members of the Executive Committee are:

Peter Dreyfuss
Deborah Holmes
Les Sterman
Dale Ludwig
Kate Fish
Russ Unger
Mike Apprill

The Executive Committee will hold a conference call before Christmas.

The membership of each subcommittee is listed below:

Education, Information, Incentives and Marketing

Bob Berkebile
Kate Fish
Mary Anne McCollum
Al Mueller
Charles Wheeler
Elaine West
Mike Apprill
John Pelzer
Wilma Yowell-Steinman, DE Staff

Transportation

Dr. Purush Terkonda (for Marina Cofer-Wildsmith)
Peter Dreyfuss
Michael Haggans
Deborah Holmes
Javier Perez
Les Sterman
Ric Telthorst
Pam Barkhaus, DE Staff

Residential, Commercial and Industrial

Dean Hales
Steve Cattron (for Drue Jennings)
John Moten (for Robert Jaudes)
Russ Unger
David Bodde
Lesa Jenkins, DE Staff

Alternative and Renewable Energy Supplies

Kent Farnsworth
Dale Ludwig
Gary Marshall
Gary Rainwater (for Charles Mueller)
Peter Raven
Don Shaw
Al Vogt
Sam Orr, DE Staff

Discussion was held on what role the representatives attending for official members should play in the Coalition. Should they have the privilege of casting votes? Should they be able to serve as officers of the Coalition or chairpersons of subcommittees? It was agreed by the group that representatives will not serve as officers and all decisions will be made by consensus rather than by vote, if at all possible.

A Division of Energy staff person has been assigned to assist each subcommittee with its information needs. Outside sources of information will be sought if necessary.

The question was posed as to whether members could serve on more than one subcommittee. Although a definite decision was not reached, several members agreed that it would be difficult to serve on more than one subcommittee unless a majority of the subcommittee work was done outside of the regular Coalition meeting. If subcommittee meetings are reserved for full Coalition meetings, all subcommittees would be meeting simultaneously. Mr. Berkebile felt that if an efficient communication system could be established including access to an email system, the subcommittees would not have to meet face-to-face all of the time and multiple memberships on the subcommittees could probably work. Division of Energy staff will research the communication options.

Chairman Dreyfuss requested a briefing on energy-related legislative proposals for the coming year. Brenda Wilbers provided that information. She spoke of proposed changes to HB 45 (alternative fuels); refiling the consolidation of the DE loan programs; introduction of state building codes; and introduction of licensing for HVAC contractors. She also provided a brief update on the status of the Energy Efficiency in State Facilities program. The Division of Energy was asked to provide monthly legislative updates to the EFC.

The Executive Committee will establish guidelines for use by the subcommittees in providing regular updates to the entire Coalition.

Committee Reports

DE staff and the respective subcommittee chairs will provide a written report of their initial subcommittee meetings for distribution with these minutes. Verbal briefings of their discussions at this meeting were given and a synopsis follows. The subcommittees were also requested to provide their future subcommittee reports to the full EFC prior to EFC meetings, in order to reduce the time spent at the EFC meetings giving verbal updates. The Executive Committee will establish guidelines for use by the subcommittees in providing regular updates to the entire Coalition. At some point, the subcommittee reports and their respective recommendations should be approved by the full Coalition.

Education and Information, Incentives and Marketing

Co-facilitators: Bob Berkebile and Kate Fish Staff contact: Wilma Yowell-Steinman

Creating educational opportunities for the citizens of the state, ranging from EFC members to government officials to school children, is a top priority for this group. Education on a personal level is required in order for citizens to realize what affect energy has on them as individuals and on the state's economy. They requested staff assistance in gathering information regarding individual rates of consumption and production. This group requested that other EFC members provide them with data they may be aware of regarding successful educational projects being conducted.

Transportation

Chairman: Les Sterman

Staff Contact: Pam Barkhaus

This group developed a 5-step plan for fulfilling its mission:

- (1) Develop an inventory of other states' fuel supply data and infrastructure;
- (2) Develop performance indicators;
- (3) Define the relationships that exist between transportation systems, energy and the economy;
- (4) Identify transportation/energy strategies that will provide needed economic benefits; and

(5) Develop a set of recommendations to make to the Governor including legislative, budgetary or other regulatory actions that can be taken at the state level.

Residential, Institutional, Commercial and Industrial Facilities

Chairman: Russ Unger Staff Contact: Lesa Jenkins

This group focused their discussion on building codes, licensing of HVAC contractors, home energy rating systems, life-cycle costing, and indoor/outdoor air quality. It was suggested that productivity levels in buildings be a part of their discussions as well.

Alternative and Renewable Energy Supplies

Co-Chairman: Dale Ludwig and Gary Marshall

Staff Contact: Sam Orr

This group discussed the underlying question of "What are alternative/renewable forms of energy? Included are hydropower, wind, solar, biomass, waste energy, alternative fueled vehicles, and landfill gases. The group established a set of four goals to guide them in their final recommendation:

- (1) Determine the feasibility of utilizing each energy type in Missouri;
- (2) Develop a view of integrated energy systems and the geographic boundaries for their use;
- (3) Evaluate current utilization; and
- (4) Develop a recommendation.

Dave Bedan and Brenda Wilbers of the Division of Energy are available to provide additional information to the group if necessary.

Future Business

It was noted that the Executive Order requires that the Coalition meet quarterly. Mr. Palmer explained that state funds are available to pay reasonable and necessary expenses of members attending full Coalition meetings or subcommittee meetings. He asked that EFC members obtain prior approval from the Division of Energy before committing to expending funds for out-of-the-ordinary expenses such as air fares, speaker fees, conference fees, etc. These types of expenses will be examined on a case-by-case basis.

The next meeting of the Coalition will be held on March 7 in Jefferson City.

Energy Futures Coalition

March 7, 1995 Jefferson City, MO 8:00 a.m. - 2:00 p.m.

Agenda

7:30 - 8:00	Continental Breakfast
8:00 - 8:15	Opening remarks/Announcements/Introductions Approval of December 6 minutes
8:15 - 9:45	Concurrent Subcommittee Meetings Transportation Residential, Commercial, Industrial Alternative and Renewable Energy Supplies Education, Incentives, Marketing
9:45 - 10:00	Break
10:00 - 12:00	Meeting of Full Coalition
10:00 - 11:15	Subcommittee Reports
11:15 - 12:00	Division of Energy Report - Cher Stuewe-Portnoff EIERA Report - Steve Mahfood
12:00 - 1:30	Lunch at Nick's Homestead * Recognition of DE Energy Essay contest winners
1:30 - 2:00	EFC Planning
2:00 p.m.	Adjourn

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Minutes

Energy Futures Coalition members present were: Chairman Peter Dreyfuss, Vice-Chair Deborah Holmes, Brian Stockman (for Gary Marshall), John Moten (for Robert Jaudes), Steve Cattron (for Drue Jennings), Russ Unger, Gary Rainwater (for Charles Mueller), Les Sterman, Elaine West, Bob Berkebile, Dean Hales, Ric Telthorst, Don Shaw, Al Mueller, Kent Farnsworth, and Dale Ludwig.

Approval of Previous Minutes

The minutes of the December 6, 1994 Energy Futures Coalition meeting and the January 31, 1995 minutes of the Executive Committee meeting were approved with no changes or corrections.

New Membership

Chairman Dreyfuss requested that any members who have recommendations for possible new members please forward those names to him and he will pass them on to the Governor's Office.

Review of Agenda

No additions or corrections were made to the agenda.

Subcommittee Meetings

The subcommittees held meetings from 8:30 - 10:00 a.m.

Subcommittee Reports

Transportation

Mr. Sterman reported that the Transportation Subcommittee's primary activities have been developing a workplan and time table. The workplan focuses on four key performance measures:

- 1. Inventory of the energy situation in Missouri.
- 2. Define the relationship between transportation, energy, and Missouri's economy.
- 3. Identify specific energy strategies that provide economic benefits.
- 4. Develop recommendations for the Governor.

A representative from the Missouri Highway and Transportation Department has been

attending subcommittee meetings. The Department of Economic Development has been invited to participate also. It was thought these departments could provide additional information to the subcommittee. A workplan and timetable has been developed and the subcommittee has begun putting together an inventory of transportation fuel use in the state.

Residential, Institutional, Commercial and Industrial Facilities

Mr. Unger thanked Lesa Jenkins for all of the help she has given the subcommittee. He distributed the workplan the subcommittee is following to develop the Governor's recommendations. The subcommittee is currently in the information gathering stage and they are encountering several educational and training issues in their discussions, e.g., building codes and HVAC licensing. Lesa Jenkins briefed the group on the components of the EESF Program that the Division of Energy is currently in the early stages of administering with the Office of Administration. Steve Mahfood spoke to the issues that the EESF Policy and Finance Task Force is currently discussing. The Commercial/Residential/Industrial group will look further at the EESF legislation. They will also look to Office of Administration - Design & Construction for their input. It was suggested that the Coalition recommend a demonstration project such as rehabilitation of an existing state building. The group suggested that individuals with a back ground in financing be sought as additional members of this subcommittee. Although several of the subcommittees sought assistance from various state agencies, it was recommended and approved that state employees not be considered members of any of the subcommittees.

Alternative and Renewable Energy Supplies

Sam Orr provided this report. He distributed the group's draft workplan. The group has discovered that there are all kinds of energy sources and those sources are in competition with each other. They are also looking at how the state is currently supplied with its energy needs and how those various supplies can compete successfully in the future. The subcommittee is preparing white papers on corn ethanol, wind and solar energy, and biodiesel, and they will be distributed to the full Coalition when final. Sam also announced that the Division of Energy is hosting a Bio-Power Conference on June 7-8, with the assistance of the Union of Concerned Scientists. Conference information will be provided to all EFC Members when it becomes final.

Information, Education, Incentives and Marketing

Mayor McCollum reported that members of the subcommittee have been contacting various groups and organizations to see what mediums they are using as educational tools. The group is looking for creative ways to provide information to all sectors. She asked that other EFC members provide the information/education group with any informational/educational materials that their organizations use to reach clients.

Cher Stuewe-Portnoff spoke of the importance of educating legislators on energy issues. She requested the assistance of the EFC to target the clients who will benefit most from the resources the Division has available for educational opportunities.

Chairman Dreyfuss added that, in addition, there is a need to provide EFC members with educational opportunities. He suggested sponsoring a workshop and inviting guest speakers to discuss the various issues that have surfaced during the EFC meetings. Also, to keep all members informed of the issues being discussed, each committee's report should be provided to the other committee chairs for distribution to their committees' members.

Mr. Telthorst asked for clarification regarding the tenure of the EFC. Chairman Dreyfuss replied that the EFC runs the length of Govérnor Carnahan's term. Mr. Telthorst suggested that the Coalition may need to prioritize the recommendations brought forward by each subcommittee and the top ranked priorities would be included in the EFC recommendations required to be submitted to the Governor in late 1995. He also suggested developing timelines for carrying out the recommendations and also developing short and long-term goals. Each committee should plan to provide these materials as part of the subcommittee's recommendation.

Chairman Dreyfuss suggested that the Information/Education Subcommittee consider sponsoring a statewide conference on energy efficiency, possibly to be held in October. The group discussed whether attendance at the informational sessions should be limited to EFC members or should other interested parties be invited to attend. Some members felt that the sessions should be for the purposes of educating the EFC members only.

Discussion then turned to possibly including utility planning and building codes in addition to energy efficiency. A suggested topic was, "Should utility planning be imposed on both regulated and non-regulated entities?" Mr. Cattron suggested presenting an IRP session with representatives from several utilities participating in a panel discussion. He offered to assist in the planning of this session. Chairman Dreyfuss suggested inviting other interested parties to present their views on IRP also. The Executive Committee will discuss the issue further to ensure balanced presentations.

Cher Stuewe-Portnoff and Steve Mahfood were scheduled to update the group on the activities of the Division of Energy and EIERA, but time ran short. It was agreed that Cher and Steve would provide their comments in writing to EFC members in lieu of oral presentations.

Next Meeting Date

Two possible dates were discussed for the next meeting: May 18-19 or June 5-6 (to coincide with those members who wish to attend the Bio-Power Conference). Mayor McCollum offered to host the next meeting in Columbia. The meeting will begin at noon on the first day and end at noon on the second day. The committee meetings will be held during the evening of the first day. The Division of Energy will determine which date is most feasible and notify all EFC members. The group also tentatively scheduled a future meeting for September 18-19, 1995.

of th	e Junior Acad	emy of Science	ead where the contest wit	h awards.		
The	meeting adjou	rned immediate	ely following	g the awards	presentation.	



Energy Futures Coalition

May 18-19, 1995 Columbia, Missouri 9:45 a.m. - 6:00 p.m.

Agenda

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Thursday, May 18			
9:45-10:00	Welcome and Introductions: Peter Dreyfuss, Metropolitan Energy Center		
10:00-12:00	Panel on Building Codes/Home Energy Rating Systems Moderator: Russ Unger, Results Associates Kate McQueen, Director, National Building Codes Assistance Project Ron Hughes, Residential Energy Consulting Bill Boucher, Missouri House of Representatives Gerald Borgstadt, Chair, Missouri Committee for Model Codes		
12:00-12:15 p.m.	Break		
12:15-1:45 p.m.	Lunch Speaker: Karl Rabago, Deputy Assistant Secretary for Utility Technologies, Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy		
1:45-2:00	Break		
2:00-5:00	Panel on Integrated Resource Planning Moderator: Steve Cattron, Vice-President KCP&L		
	Guest Speaker: Doug Bauer, Utility Program Manager, Energy Division, Oak Ridge National Laboratory		
	Panel Members: George Mentrup, Manager, Market Assessment, KCP&L Ryan Kind, Public Utility Economist, Missouri Office of the Public Counsel Mark Krebs, Director of Market Planning, Laclede Gas Michael Proctor, Chief Economist, Missouri Public Service Commission		
5:00	Adjourn		
6:00	Committees meet on their own over dinner at restaurant of their choice		

Friday, May 19, 1995
7:30 - 8:00

Continental Breakfast

8:00 - 8:45

Missouri Statewide Energy Study

Steve Mahfood, EIERA

8:45 - 9:30

A Partnership for Missouri's Energy Future

9:30 - 9:45

Break

9:45 - 10:45

Energy Futures Coalition 1995-96 Workplan

Interim Report (Oct. 1995)

Report on Recommendations for Missouri's Energy Future (Oct. 1996)

10:45 - 11:30

Committee Reports

11:30 - 12:00

Business Meeting

Next Meeting Dates

Other Business

12:00

Adjourn

Minutes

On May 18, the Energy Futures Coalition hosted panel discussions on Building Codes & Home Energy Rating Systems (HERS), and Integrated Resource Planning. Panelists for the morning session on Building Codes & HERS were Kate McQueen, Director of the National Building Codes Assistance Project; Ron Hughes, President of Residential Energy Consulting; and Gerald Borgstadt, Chairman of the Missouri Committee for Model Energy Codes. Ms. McQueen spoke about the necessity of building codes and the economic benefits of energy codes. The playing field should be leveled for energy efficient equipment and structures by eliminating the current barriers of uninformed home buyers, third-party decision makers who do not pay the energy bills, and financing that focuses on initial cost rather than life cycle costing. She discussed the role of the Building Codes Assistance Project in helping states comply with the Energy Policy Act and in understanding ASHRAE 90.1-1989.

Mr. Hughes talked about the need for a uniform home energy rating system among states that is able to recognize and measure "efficiency." Without a HERS, the benefits of efficiency cannot be measured by appraisers, and, therefore, has no added value to the structure which results in no incentive for the efficient measures. He stated that it costs an additional \$900 - \$2000 to build an energy efficient home. Utilities should support HERS as it will reduce their peak loads.

Mr. Borgstadt talked about the efforts of the Missouri Committee for Model Codes, which is comprised of local building code officials, to establish a state building code in Missouri. The issue should not create rural opposition if the economic benefits are recognized, which include the threat of unavailability of federal disaster funds, as well as increasing home insurance rates that will result if no code is in place. A legislative proposal needs bipartisan support. The committee has developed position statements that identify which provisions of a state building code the committee would support during the next legislative session. The problem of enforcement of the codes needs to be addressed in any proposal.

Karl Rabago, Deputy Assistant Secretary for Utility Technologies, Office of Energy Efficiency and Renewable Energy with the U.S. Department of Energy, was the featured luncheon speaker. He presented a broad overview of U.S. energy use by source and emphasized our dependence on foreign oil and petroleum products. He compared the subsidies for renewable energy to fossil fuels indicating that a level of playing field does not exist yet. He stated that one-third to two-thirds of all environmental pollutants come from electric generation. He also spoke of DOE's role in technology transfer and market development.

Panelists for the afternoon Integrated Resource Planning session were George Mentrup, Manager of Market Assessment for KCPL; Ryan Kind, a Public Utility Economist with the Missouri Office of Public Counsel; Mark Krebs, Director of Market Planning at Laclede Gas Company; and Michael Proctor, Chief Economist with the Missouri Public Service Commission. Douglas Bauer from Oak Ridge National Laboratories was to serve as moderator, however, inclement weather made it impossible for him to attend; therefore, Chairman Dreyfuss served as moderator. The discussion centered around how integrated resource management is conducted in Missouri. Issues included were whether utilities should provide the lowest cost service to their customers, how cost is determined, and what time scale should be used. Discussion continued regarding the competition between electricity and natural gas providers and how that competition affects the economic realities of lowest most. Other issues discussed included stranded investment, peak load management, switching energy types, relative amounts of pollution produced for the type of energy used, and if the public interest is best served with the current law.

The EFC committees held meetings during the evening hours.

Prior to the meeting commencing on May 19, Chairman Dreyfuss welcomed Theresa Thomas from DOE/KCSO.

Missouri Statewide Energy Study

Steve Mahfood, Executive Director of EIERA, provided remarks on the development of the Statewide Energy Study. During the development stage, emphasis was placed on economics--not on energy or the environment. Most of the recommendations focused on energy efficiency.

A Partnership for Missouri's Energy Future

Cher Stuewe-Portnoff, Director of the Division of Energy, delivered a presentation on the current activities and future direction of the division. Copies of her presentation will be provided to all EFC members, as well as the recently completed SECP state plan. She noted that the state fleet transportation efficiency report will be distributed at the end of June. The group suggested that David Shorr, Director of the Department of Natural Resources, and Richard Hanson, Commissioner of the Office of Administration, be invited to attend a future EFC meeting in order to begin the cultural change that needs to take place within state government to get this program underway. Rosemary Wilson suggested asking the Office of Administration - Division of Design & Construction and the Missouri Highway & Transportation Department to make a presentation to the EFC at a future meeting.

Committee Reports

Transportation Subcommittee

Michael Haggans provided the report from this committee. He distributed copies of their report (attached). The subcommittee requests comments on the draft workplan/timetable by May 26. Comments should be sent to Donna Day at East-West Gateway Coordinating Council. The committee's next meeting is June 6.

Residential, Institutional, Commercial and Industrial Facilities

Russ Unger reported that this committee is currently reviewing their activities and are looking at involving the Office of Administration - Division of Design & Construction to assist them. There was nothing further to report.

Alternative and Renewable Energy Supplies Subcommittee

Sam Orr reported that this committee is proceeding with the development of white papers to provide background information to the full Coalition regarding the energy sources this committee has been studying. Utilities play a major role and have a substantial impact on energy resources, as do transportation fuels. The final report will include recommendations on soydiesel, ethanol, solar, hydropower and waste-to-energy. Rural land use issues vs. transportation fuels may also be included. The St. Louis Clean Cities program has collected much information regarding fuel sources and they will provide that information to the committee.

Education, Information, Marketing and Incentives Subcommittee

This committee is continuing to collect success stories throughout the state from both the public and private sector. The Division of Energy will be hosting focus group sessions in June to determine what the general public thinks about energy issues. Some of the information obtained may be useful to this committee. They will also be requesting customer survey data from utility companies who have it available through their marketing programs. The committee is also assessing the effect of possible federal budget cuts on information and marketing programs.

Interim Report & Recommendations

The EFC Interim Report to the Governor is due in October 1995, with final recommendations due in October 1996. The group discussed several options for bringing together the interim report including outlining the strategies then preparing milestones that must be met to obtain those strategies. Donna Day asked how the committee reports will come together to form the final report. The group was asked to refer to the May 1 memo from Bill Palmer suggesting an outline for the committees to follow in finalizing the interim report. It was suggested that the Executive Committee meet to discuss how the report should be organized. Each committee should be prepared to present their draft recommendations at the August meeting of the Coalition. It was realized that not all members are going to agree with all of the recommendations. Some issues may need to be presented as having some conflict within the group, although every attempt should be made to obtain a consensus that is acceptable to both sides. These issues will be brought to closure when the committees present their draft reports. Mr. Berkebile asked how the Coalition will reach consensus on the recommendations when they are such a diverse group. For instance, Mr. Bodde, Mr. Shaw and Ms. Wilson discussed their individual views on CO₂ concentrations and other environmental externalities. Ms. Stuewe-Portnoff

added that the Division of Energy has funds allocated to the production of the interim report and have also included in the SECP state plan a public comment period that the group may wish to take advantage of.

Mr. Berkebile stated that policy should be made by informed people. What quality of information is enough to create a "no regrets" policy? Mr. Bodde suggested simply including the group's assumptions as part of the recommendations and note those recommendations that should be explicit, i.e., what problem is the recommendation attempting to solve? Mr. Shaw suggested drafting the recommendations in brief 2-3 sentence entries and as the group goes through them, iron out any differences that surface. The Executive Committee will hold a conference call on June 5 at 9:00 a.m. to discuss formulation of the interim report.

Steve Mahfood briefed the group on the strategy used during the focus group meetings to develop the Energy Study. He and Chairman Dreyfuss will discuss this further.

Theresa Thomas complimented the group on its process and on the level and depth of the issues they have discussed.

Prior to adjournment, Donna Day announced that the National Clean Cities Conference will be held September 10-13 in St. Louis at the Adams Mark Hotel.

Chairman Dreyfuss asked that the minutes be prepared and distributed as soon after the Coalition meetings as possible.

The next EFC meeting is scheduled for August 28-29 in Jefferson City.

ENERGY FUTURES COALITION

August 28, 1995 Jefferson City, MO 10:00 a.m. - 4:00 p.m.

Agenda

1)	Welcome and Introductions
2)	Approval of Minutes of May 18 Meeting
3)	Representatives and Voting
4)	Committee Reports
5)	Discussion on Reaching a Consensus on the Goals of the Coalition
6)	Lunch
7)	Committee Breakout Sessions
8)	Discussion

Note: Executive Committee Meeting Follows the Adjournment of the Full Coalition Meeting

Minutes

Welcome and Introductions

Chairman Peter Dreyfuss welcomed the members and guests. Ms. Wilson spoke of a publication entitled, "Energy Choices in a Competitive Era," which she had brought several copies for anyone who wanted a copy. Mr. Marshall also had several copies of the brochure for the National Clean Cities Conference in St. Louis in September, for anyone who was interested in attending.

Approval of Minutes of May 18 Meeting

The minutes of the May 18-19 meeting in Columbia were approved with no corrections or additions.

Representatives and Voting

The Division of Energy distributed a survey to EFC members several weeks before this meeting, soliciting their input on the question of whether representatives of members should have voting rights and hold offices on the Coalition. If so, they were asked to name their representative in the event of their absence at meetings. Of the responses received, the vote was 13-3 in favor of allowing representatives voting power and holding offices.

Mr. Moten expressed his desire to be allowed to vote as Mr. Jaudes' representative. He stated that as his boss' representative, he would not vote contrary to the way Mr. Jaudes would vote, nor did he believe any other representative would.

In contrast, Mr. Bodde, who voted against the issue, felt that the appointed members should be attending meetings personally; after all, they were appointed by the Governor. He felt it would be more appropriate for those members who are not attending, to submit their resignations to the Governor so he could appoint others who would be able to attend.

Mr. Telthorst stated that it is not unusual that all of the appointees are not able to attend meetings, given the many demands on everyone's time. If the member cannot attend, they should be able to send a representative. Ms. West also stated her support for representatives having voting powers. Ms. Holmes raised the question of whether the representative should be the same person or could that change from meeting to meeting.

Mr. Berkebile stressed the importance of continuity and urged that the representative should be the same person for all meetings. He also stated that he feels strongly that all

representatives keep the members well informed of the proceedings of the Coalition. There was a reason the Governor appointed who he did.

Mr. Mueller stated that it is unrealistic to expect that utility CEO's would be able to attend the meetings. Their staffs probably have more technical expertise to offer than the CEO's. He also questioned whose name would be on the interim/final reports. Chairman Dreyfuss replied that the member's names would appear on the report. He voiced Mr. Cattron's thoughts about his ability to represent Mr. Jennings. Mr. Cattron was unable to attend this meeting.

Mr. Willard stated that he would rather have someone represent him at a meeting if he is unable to attend, as opposed to his organization not being represented at all.

Mr. Marshall stated that in his absence, he is briefed by his representative following any Coalition meeting. He also would prefer that his association be represented in some way, rather than not at all.

Ms. Stuewe-Portnoff announced to the group that she has discussed this issue with Brad Ketcher of the Governor's Office and the Governor supports the issue of members appointing delegates to represent them at meetings which they are unable to attend, but he, too, would like continuity in that representation.

At this point, Ms. Wilson moved that members be allowed to name representatives and those representatives have voting rights. Mr. Marshall seconded the motion. Mr. Ludwig amended the motion by including language stating that members should designate a single person to represent them at all meetings. If that representative needs to be replaced in the future, such as if they leave the organization, the member would be able to name another representative at that time. The amended motion passed unanimously.

Discussion of Reaching a Consensus on the Goals of the Coalition

Chairman Dreyfuss reminded the group that a mission was agreed to at the Coalition's first meeting. Each committee has subsequently identified a mission, objectives and strategies for their respective groups. The Coalition as a whole should continue to use a consensus-building format. The entire group needs to identify areas of agreement and disagreement. The Coalition as a whole should support the mission and the mission statements of the individual committees.

It was suggested that the Executive Committee develop a format for the Interim Report and also provide background regarding how the group reached this point. All members would be given an opportunity to comment on the draft report.

Mr. Apprill questioned how the areas of disagreement would be dealt with. It was suggested that a portion of the interim report be devoted to listing those areas in which the

Coalition could not reach consensus. Those areas of disagreement could then be focused on during the remaining term of the Coalition, then a subsequent discussion of these issues included in the final report. The committees could use the next year to develop consensus on these issues.

Committee Reports

Transportation Committee

Mr. Haggans reviewed the draft Transportation Committee report and solicited comments from the group regarding the statement of goals and objectives. Ms. Wilson questioned the phrase "transportation planning organization" specifically, who is being referred to by this phrase. Mr. Haggans stated that all organizations involved in transportation planning are included, i.e., East-West Gateway Coordinating Council, Mid-America Regional Council, and all state agencies that have a stake in transportation planning. Ms. Wilson suggested that the report specify who is being referred to.

Mr. Farnsworth asked whether targets should be included in the performance indicators. The EFC should not, however, establish the targets. Chairman Dreyfuss suggested that the committee look at possible targets over the next year and they be prepared then to include those targets in the final report. This committee found that the availability of data has hindered their ability to prepare an in-depth report which would include supporting documentation. Everyone agreed that the mission and goals of the transportation committee, as well as all of the committees, should be supported by the full Coalition. The Executive Committee will work to identify the common elements of each committee's report.

Alternative and Renewable Energy Supplies Committee

Mr. Ludwig read the mission statement developed by this committee. Mr. Bodde suggested including agricultural feed stock as a major source of alternate fuels. The inclusion of feed stock could serve as a good marketing tool as well, since Missouri is an agricultural state. Mr. Ludwig also reviewed the draft objectives. The group questioned whether the objectives were indeed objectives, or are they recommendations, and are the objectives for this committee or objectives for the state? It was suggested that this committee look at issues from an environmental standpoint as well as an economic standpoint.

Considerable discussion was held regarding the term "wholesale" and the group discussed the need to include the section related to IRP. The committee agreed to delete the references to IRP. It should be part of the Education/Information report, however.

Residential, Institutional, Industrial and Commercial Facilities

Mr. Moten reported that this committee recently met with Cher Stuewe-Portnoff and other DE staff. It was suggested that the report outline the differences between government buildings and buildings owned or operated by the private sector. There was considerable discussion regarding cost-based services and how that relates to some of the statements in this draft report. Mr. Boyt suggested including life-cycle cost analysis in all buildings when determining energy efficiency, then figure in comfort, the use of renewables, indoor air quality, etc. The committee is concerned about offering recommendations that will not mandate additional regulations. The committee will discuss all of these issues further during their afternoon meeting.

Education, Information, Marketing and Incentives Committee

Ms. McCollum noted that there are numerous common threads throughout all of the committee reports. She stated that DE's EEI unit is in the process of restructuring and suggested waiting to see what that means for the energy education field, and how DE's program will interface with the recommendations of the EFC. Mr. Bodde suggested also researching innovative projects that are occurring in other states and make that information available to Missouri citizens. Mr. Marshall suggested including objectives that use incentives to promote the use of alternative/renewable fuels. Reference was made to a year-old report presented to the Governor entitled, "Creating an Environmentally Literate Citizenry." The committee will review this report further for ways in which the EFC may be able to tap into some of that group's ideas, such as the recommendations regarding the establishment of councils and technical working groups.

The group will also consider if, and how, citizens receive their energy information. Members discussed the possibility of DE distributing a public opinion survey. Mr. Buchanan of DE spoke of a DNR survey that was conducted a few years ago regarding DNR's service delivery. It is available to anyone who would like a copy.

Interim Report

The group agreed to meet again on October 3, possibly in the Capitol, to finalize the interim report. The meeting will run from noon to 2:00 p.m., with a working lunch. Chairman Dreyfuss will investigate the possibility of the Coalition meeting with the Governor later in October for presentation of the interim report.

A first draft of the interim report will be mailed to the members by September 22. The committees met immediately following lunch.

Executive Committee Minutes

The Executive Committee developed an outline for compiling the interim report.

- 1. Cover page
 - List of membership
 - Mission statement
- 2. Introduction to the formation of the EFC
- 3. Background
 - Meeting schedule
 - Committee structure
 - Speakers
 - Etc.
- 4. Committee Reports
 - Alternative/Renewable Fuel Sources
 - Residential, Industrial/Commercial Buildings
 - Transportation
 - Education/Information
- 5. Plan for the coming year -- where we are heading and what we will be doing.

The interim report will contain a one-half page narrative of the discussion points, including a discussion of the issues on which the Coalition could not reach consensus. Specifically, who participated in the discussions, who agreed and who did not, what the group could not agree on, and what the group will be doing in the coming year. A proposal was put forth to also include a recommendation for continuation of the EFC, or a similar group, after Governor Carnahan's term ends next year. Performance indicators will be included in this section.

All committee reports should be edited by Friday, September 1. The edits should be directed to DE staff and staff will make the edits.

DE staff are responsible for formulating the background section of the report, as well as the membership list and a listing of the meeting dates.

All reports should be typed in the same format:

- Goals
- Objectives
- Actions/Strategies
- Discussion

Chairman Dreyfuss will work with DE staff to develop the coming year's activities.

Input from members for the other sections of the report should be sent to DE staff by September 15. DE staff will mail the draft reports to EFC members on September 22. The draft report will be the sole topic of discussion at the October 3 meeting. DE staff will contact the Governor's Office for his availability in late October for presentation of the interim report.



Energy Futures Coalition October 3, 1995 Jefferson City, Missouri State Capitol Room 2

Agenda

12:00 p.m. - 2:30 p.m. Review and edit Draft Interim Report to Governor Carnahan

2:30 p.m. - 3:00 p.m. Discuss meeting with Governor Carnahan on October 25

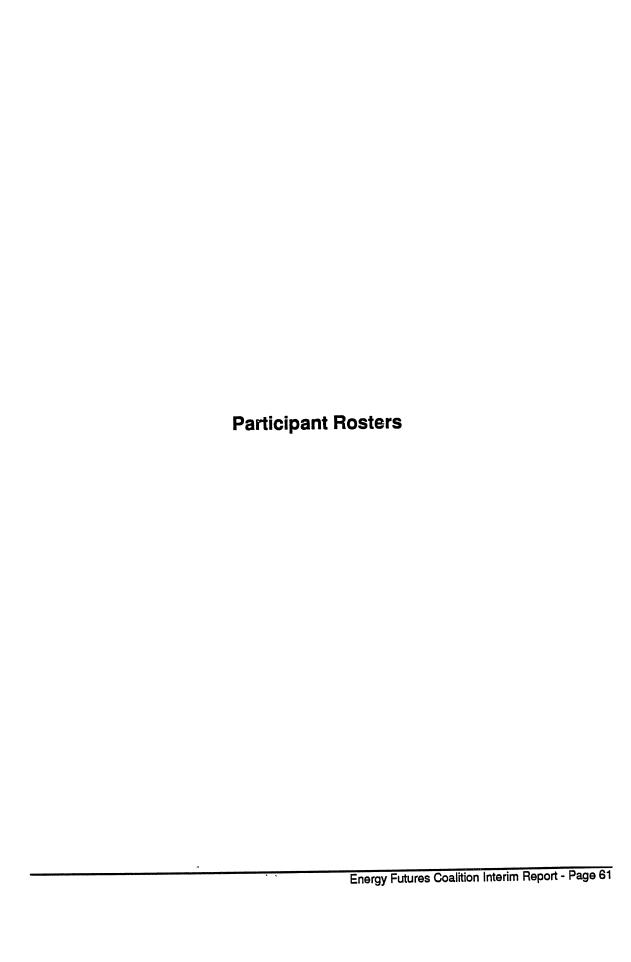
Meeting Summary

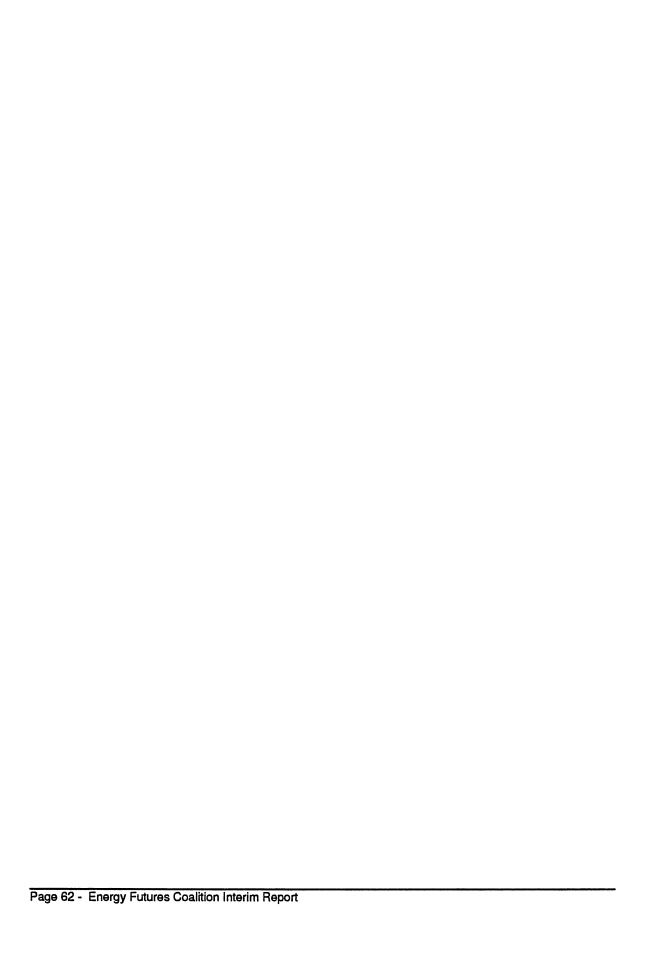
Coalition members discussed, edited and approved the Draft Interim Report to Governor Carnahan.

The Coalition agreed to meet from 1:00 p.m. until 2:15 p.m. on October 25th in Jefferson City to discuss next years work plan. The Coalition members will leave at 2:15 to go to the Governor's mansion to present the Interim Report at the Governor at 2:30 p.m.

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October 25, 1995

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Bob Berkebile John Pelzer

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Elaine West
Charles Wheeler

Al Mueller

Wilma Yowell-Steinman, DE

Liaison

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Les Sterman, Chairman Michael Haggans Deborah Holmes Peter Dreyfuss Ric Telthorst Don Kueneke (Marina Cofer-Wildsmith) Bill Borgmeyer, Department of Economic Development Liaison J.T. Yarnell, MHTD Liaison John Buchanan, DE Liaison

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Dean Hales
Bob Evans

Dr. David Bodde

Javier Perez

Steve Cattron (Drue Jennings)

John Moten (Robert Jaudes) Lesa Jenkins, DE Liaison

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Assisted by:
The Missouri Department of Natural Resources'
Division of Energy
and
The Environmental Improvement and Energy Resources Authority

